

ABSTRACT

An endocardial mapping system is described to map electric field activity in a heart chamber. The system includes a catheter assembly having an expandable array of electrodes and a plug with each electrode connected to a single connection in the plug. The system also contains an interface apparatus with a plug adapter to receive the catheter plug, a voltage acquisition apparatus, and a signal generator to generate signals in response to voltages received on the electrodes. Finally, the system contains a computer capable of computing a three-dimensional volumetric electric field distribution based on signals received from the signal generator.